XXXIV. *An Account of a new Species of the* Bark-Tree, *found in the Iſland of St. Lucia. By Mr.* George Davidſon; *communicated by* Donald Monro, *M. D. Phyſician to the Army, F. R. S.*

Read June 24, 1784.

DR. DONALD MONRO.

SIR,

HAVING received from my correſpondent Mr. DAVIDSON, ſurgeon, in the iſland of St. Lucia, ſome Bark, the product of that iſland, which is ſaid to poſſeſs the virtues of the Jeſuit's Bark, and in a much ſmaller doſe, I ſhall eſteem it a favour if you will lay before the Royal Society the ſpecimen which I have ſent to you with this letter, together with Mr. DAVIDSON's account of it, if you think they merit that honour.

I have examined the dried ſpecimens very carefully. They are not ſo well preſerved as I could wiſh; but I have ſince ſeen much finer in the poſſeſſion of Sir JOSEPH BANKS, who has done me the honour to favour me with the following character, as moſt diſtinctive of it from the other ſpecies of Cinchona already deſcribed, which he gave me an opportunity of examining.

It

It is undoubtedly a Cinchona, but not the Cinchona officinalis of LINNÆUS; for it differs from it eſſentially in its bark in ſeveral particulars. It has an emetic quality not common to the true bark, breaks more woody and ſplintery, and is far more nauſeous to the taſte. Its decoction is of a dull Burgundy colour; and its extract reſembles more the bitter of Gentian than that of the Quinquina. I have procured four ounces of it from half a pound of the Bark boiled in water, and herewith ſend to you a ſmall ſpecimen.

The drawings, which accompany this letter, are exact copies of the ſpecimens which I received; I therefore hope they will not be thought unworthy the acceptance of the Royal Society.

I have the honour to be, &c.

Henrietta-ſtreet, Nov. 6, 1783. G. WILSON.

Botanic character of the Bark-Tree of St. Lucia.

"Cinchona floribus paniculatis, glabris; laciniis linearibus, "tubo longioribus; ſtaminibus exſertis; foliis ellipticis, glabris."

Extract of a Letter from Mr. GEORGE DAVIDSON, *dated* St. Lucia, July 15, 1783.

IT is now about four years ſince Mr. ALEXANDER ANDERSON diſcovered in the woods, near the Grand Cul de Sac, ſome trees reſembling, in the botanical characters, the

true Quinquina of LINNÆUS. He brought the bark, flowers, and ſeeds, to Dr. YOUNG of the General Hoſpital, and trial was made of it there; but not being ſufficiently dried, its ſtrong emetic and purgative qualities prevented its exhibition.

The publication of Dr. SAUNDERS, which I received about two months ago, mentioning the introduction of a ſpecies of bark of a redder colour, and poſſeſſing greater powers than the bark formerly in uſe, induced us here to try the bark of this country. Dr. YOUNG had by him ſome that was collected in General GRANT's time: on account of the length of time it had been kept, and its being ſufficiently dried, he has met with all the ſucceſs he could wiſh.

It is manifeſtly more aſtringent than the bark, and the bitter is likewiſe more durable on the palate.

Hitherto I have generally uſed the cold infuſion, either in lime or ſimple water, in the proportion of one ounce to three pints of the water. I have likewiſe given it in ſubſtance from twenty to thirty grains; but never exceeded the laſt quantity, for I never found the ſtomach able to retain more than twenty grains.

Joined with the Canella alba, it forms in ſpirits an agreeable and elegant tincture. I have made a tincture from the ſeeds, which are infinitely ſtronger in taſte than the bark itſelf.

(Signed) GEO. DAVIDSON.

Mr.

Mr. George Davidſon's *account of the* Bark-Tree *of the iſland of* St. Lucia.

THE Bark-Tree of this iſland is nearly about the ſize of the cherry-tree, ſeldom thicker than the thigh, and tolerably ſtraight; the wood is light and porous, without any of the bitterneſs and aſtringency of the bark itſelf.

It delights in a ſhady ſituation, the north-weſt aſpect of hills, under larger trees; and is generally to be found about the middle of an hill, near ſome running water.

The leaves are large, oblong, oppoſite, and plain, preſerving (as well as the flowers and ſeeds) the bitter taſte of the bark.

In the beginning of the rainy ſeaſon (June), the tree puts forth its flowers in ſmall tufts; at firſt they are white, but afterwards turn purpliſh. The ſtamina are five in number, with a ſingle ſtyle. The germen is oblong, bilocular, and furrowed on each ſide. The ſeeds are many, and of the winged kind. The corolla is monopetalous, with its mouth divided into five long ſegments.

The ſoil in general where it grows is a ſtiff red clay. The bark itſelf is of a lighter red than that ſent out here to the hoſpital under the name of *red bark*. It inclines more to the colour of cinnamon. The bitterneſs and aſtringency appear to be greater than in either of the other barks.

I apprehend, the proper ſeaſon for obtaining it is about the month of March, before the flowers come out: after-experience will beſt determine this.

Infuſed in cold water, in which form, or in lime-water, I generally uſe it, it forms a very red tincture, poſſeſſing the

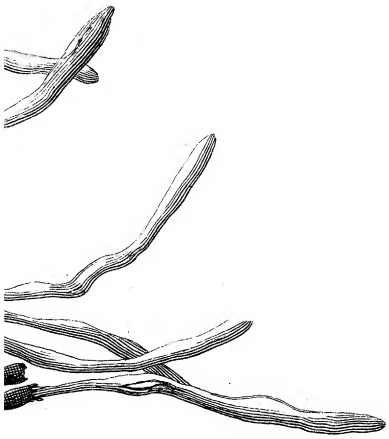
bitterneſs and aſtringency of the bark very ſtrongly. A few drops of the Tinctura florum martialium give it a very black colour, and occaſion a copious depoſition of a black ſediment. It does the ſame with the ſpirituous tincture.

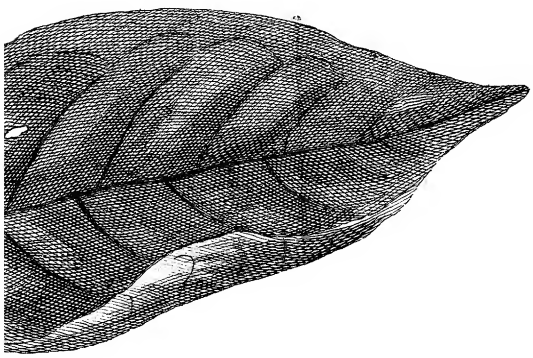
With ſpirits it forms a beautiful red tincture.

Explanation of the references tab. XIX.

A. A branch of the Cinchona of St Lucia, with the flowers not yet opened.
B. The entire ſeed-veſſels.
C. A ſeed-veſſel ſplit.
D. One of the ſeeds, of its natural ſize.
E. The ſame magnified.

B
A
C





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